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ABSTRACT

The purpose of this study was to determine whether terms used in the Annehurst Curriculum Classification System (ACCS) are appropriate and useful to describe learner characteristics. From the twelve characteristics postulated in the ACCS to describe learners, six were selected for study: experience, intelligence, motivation, emotion-personality, creativity, and sociability. In the ACCS, each of these characteristics is described by a series of paired words, such as patient-impatient and optimistic-pessimistic, one word in each pair being identified with the characteristic positively and the other negatively. Seven such pairs were selected from the ACCS for each of the six selected characteristics. The 84 words thus selected were dissociated from the ACCS characteristics and Q-sorted by 317 experienced teachers, each teacher sorting the 84 words to characterize a particular student. A factor analysis of the results produced a new set of characteristics, labelled by the researchers as capacity to learn, human relations, maturity, sense of independence, experience, and sense of control. These six terms may represent a way of characterizing students that is superior to the six terms from the ACCS, or they may only indicate that there are various equally valid ways of characterizing students. (IM)

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A Factor Analysis of Learner Characteristics

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The Problem

Teachers have always been concerned about trying to meet student's learning needs. What students "need to learn," however, can be looked at from several points of view.

For example, if one asks the question "what do students need to learn?" from a vocational perspective the answer is fairly straight forward. Students who plan to be pharmacists need to study chemistry and pharmacy. Students who hope to be engineers need to study mathematics and physics and engineering. Students who want to be farmers or teachers or machanists need to study the academic disciplines that are directly related to their chosen area of vocational endeavor.

On the other hand, if one asks the question "what do students need to learn?" from a cultural perspective, the answer is very different but straight forward, too. Students who are going to "grow up and become good citizens" in the United States, for example, need to learn something about the English language

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and the structure and function of American society, including its political institutions and its economic system and its customs, mores, history, and laws.

If one asks the question "what do students need to learn?" because they are the kind of people that they are, however, the answer to the question is neither obvious nor straight forward. If a student's motivation to learn is low, then it would seem reasonable to presume that that student needs curriculum materials that are high in motivational potential. If that same student's intellectual abilities are limited, though, and if the student is emotionally maladjusted or immature, one could make the case that that particular student actually needs curriculum materials that are simply organized, concrete, fact-oriented, with explicit intentions, ego involving, reflect appropriate expression of emotion, and which require the student to make decisions and abide by the consequences rather than materials that are complex, abstract, set and unequivocal, reflect inappropriate expressions of emotion, and in which the decisions are controlled by others or by chance.

To talk about students and what they need to learn in these kinds of ways is to approach the opportunities and responsibilities of teaching in a way that some teachers have intuitively functioned but about which most teachers know very little. Finding appropriate curriculum materials for individual learners is a complex and demanding responsibility. The Annehurst Curriculum Classification System[1] is a way of

classifying, organizing, storing, and retrieving curriculum materials that is based upon what is known about how learners differ and how they develop, how they learn, and how they grow.

The Annehurst Curriculum Classification System (ACCS) is a conceptual and operational tool to help teachers understand individual learners in terms of those dimensions of human existence that relate directly to learning. If teachers can understand that complex of forces and factors that go together to makeup an individual human being, then they should be in a better position to select the curriculum materials and devises the experiences and employ the procedures that will be effective in helping that particular student learn.

Looking at schooling from this perspective implies that the first act of teaching requires the teacher to understand the learner; to assess each student in terms of those aspects of human existence that relate directly to learning. The Annehurst Curriculum Classification System postulates twelve such factors: interest in a subject matter area, age, previous experience, intelligence, motivation, emotion-personality, creativity, sociability, verbal expression, auditory perception, visual perception, and motor perception. The purpose of this study was to subject six of those postulated factors to empirical scrutiny.

Specifically, those aspects of individuality that were singled out for empirical attention were these: experience,

intelligence, motivation, emotion-personality, creativity, and sociability. Two questions were posed:

(1) Are the characteristics of learners as described in the Annehurst system useful terms to help teachers make meaningful inferences about individual learners?

(2) Is there a correspondence between the clusterings of terms as they are described in the Annehurst system and the way teachers actually use those terms when they describe particular learners whom they know very well?

To state the problem in a more general way: can teachers make reasonably accurate subjective estimates of a learner's characteristics by using criteria that are more or less objective?

The purpose of this paper is to describe a study that was designed to answer questions such as those.

The Method

The Annehurst Curriculum Classification System defines each of ten factors in terms of what is described as an "elaborated continuum"[2] (age and interest are defined in other ways). Each elaborated continuum is comprised of several pairs of descriptive phrases that are opposites; that is, each pair

constitutes a partial description of both ends of the continuum. All of the phrases in the left hand column describe the "high" end of the continuum. All of the phrases in the right hand column describe the "low" end of the continuum. Taken together, these pairs of terms elaborate upon the definition, hence the term "elaborated continuum." For example, the elaborated continuum used to describe the emotion-personality dimension is portrayed in Figure 1 below.

EMOTION-PERSONALITY	
patient	impatient
open-minded	closed-minded
accepts blame	blames others
good natured	moody
has sense of humor	lacks sense of humor
confident	lacks assurance
mature	immature
optimistic	pessimistic
independent	dependent
deliberate	impulsive
internal locus of control	external locus of control
dependable	undependable
responsible	irresponsible

Figure 1. Emotion-Personality Dimension

For the purposes of the present study, seven pairs of descriptive terms for each of the six factors that were singled out for study were made into an 84-item Q-sort (i.e., 6x2x7). Each of these 84 items was a word or phrase currently used in the Annehust System to describe the characteristics of an individual learner. These words or phrases had been developed over a period of several years and verified by practicing teachers and learning theorists as appropriate ways to characterize individual learners.[3] The 84 items selected for inclusion in the Q-sort used in this study represented approximately 80 percent of the terms actually involved in the Annehurst definitions of these six factors.

These 84 items were arranged randomly on perforated pages and, along with one page of instructions and an optic scan answer blank, constituted the instrument that was used to collect data for this study (see Appendix A). The instructions directed respondents to describe "one person whom you know extremely well" by arranging the descriptive terms along an eleven category continuum from "least like the person" to "most like the person" in such a way that there was a symmetrical distribution (see "Instructions" sheet in Appendix A for specific details).

University professors from nine institutions in six different states distributed the Q-sort instruments to experienced teachers in their locale. Answer sheets were returned to the authors for analysis. In all, 317 usable responses were returned.

The Results

Each respondent's description was correlated with those of the other respondents to produce an 84 x 84 matrix of Pearson product moment correlations. This matrix was subjected to a principal axis factor analysis with a verimax rotation. Application of Cattell's scree indicated that six interpretable factors were present. The six factors had unrotated eigen values of 24.68, 5.56, 3.49, 2.75, 2.45, and 2.21 that accounted for the following cumulative percentages of variance: 29.4%, 36.0%, 41.4%, 44.6%, 47.5%, and 50.2%. The verimax eigen values for the six rotated factors were 14.64, 11.1, 4.72, 5.38, 3.48, and 2.80 respectively. The rotated factor loadings are described in Table 7.

Factor Interpretations

All of the factors identified are bipolar. Given the nature of the terms involved in the Annehurst system, that would be expected. Only two of the 84 items had factor loadings less than .30, and three other items were loaded to almost the same degree on two or more factors. The six factors described in Table 1, therefore, represent those factors that consist of items whose primary loadings exceeded .30 on one factor.

It should also be pointed out that when the descriptions that were used in this study are actually employed by teachers

who use the Annehurst Curriculum Classification System, they are always used as subdescriptors of a major category rather than as isolated terms. If you look at Figure 1 again, for example, it is obvious that the term "undependable" is listed under the general heading of Emotion-Personality. It seems reasonable to presume that the term "undependable" derives at least part of its meaning from the fact that it is listed under that rubric. The general heading is actually a factor label, in the Annehurst system, and limits the way in which a teacher is expected to use "undependable" as a term. Taken out of context, which is precisely the way each term was used in the present study (i.e., without the organizing rubric), the term "undependable" could easily be interpreted in a Social dimension sense (i.e., cannot be counted on to meet a friend, at 8:00 p.m. say, even if he agrees to do that) or in a Motivation dimension sense (i.e., does not get his homework in on time).

For the purposes of the present study, the fact that respondents described one person whom they knew very well "out of context" (i.e., without the organization rubric) creates both possibilities and problems. Terms that go together to make up factors can be looked at afresh, so to speak, and new dimensions or new factors may be identified. On the other hand, the fact that some items load on particular factors may very well have occurred simply because there was no general label

to establish context and give meaning to each term, and the act of using a general label or organizing rubric may actually increase the validity and reliability of each term when used as a way of characterizing learners. We do not know.

Given those general considerations, suppose we look now at the factors that emerged. Factor I (see Table 1) cuts across the Annehurst dimensions of experience, intelligence, creativity, motivation, and emotion-personality. More importantly, however, the three items with the largest positive loadings and three items with very large negative loadings all include the term "learning." It is obvious that this factor deals not only with how much has been learned, but it also deals with learner's characteristics which assist or retard them in learning.

The Annehurst system separates creativity from intelligence, much in the manner that Getzel and Jackson[4] presumed that they were separate aspects of human existence - different factors. Guilford,[5] on the other hand, tends to describe creativity as one aspect of the "structure of the intellect;" a "piece" of the intelligence whole, so to speak.

Factor I clearly seems to include descriptive terms that relate to <u>capacity to learn</u> broadly defined. For example, the items in Table 2 that relate to the ACCS dimensions of motivation ("inquisitive") or creative ("unimaginative" or "fluent with ideas") certainly can be interpreted within this factor as intellectual capacity or cognitive in nature. In that sense,

Factor I seems comparable to what Bloom refers to as cognitive entry behaviors.[6]

Factor II (see Table 2) also cuts across a number of Annehurst dimensions, although most of the items relate directly to the ACCS Social dimension. When the terms listed under Factor II are looked at as a factor, however, openness would seem to be a reasonable label or human relationships.

Factor III (see Table 3) also cuts across several of the Annehurst dimensions, and appears to be a maturity factor. It should also be pointed out that whereas the ACCS rationale describes "risk taker" as on the "high" end of the creativity dimension, on the present factor "risk taker" was seen as being on the "low" end of this continuum, along with "impulsive", and "demands instant gratification" (do not confuse the negative loadings with negative human qualities).

Factor IV (see Table 4) might be described as a sense of self assurance factor or as a sense of independence dimension. The items relate to the extent to which a learner "feels on top of things" or "in charge" of who he is and what he can do and where he is going.

Factor V (see Table 5) matches the Annehurst dimension of experience precisely, though it contains fewer terms. The concepts represented by these items also relate to Bloom's concept of cognitive entry behaviors. Previous experience or opportunity to learn might be appropriate labels for Factor V.

Factor VI (see Table 6) only has three items, but if four other items that load fairly heavily on this factor (although they weight even more heavily on other factors) are included, a factor that relates to sense of control or locus of control or degree of conformity seems to emerge.

Several observations might be made from a study of these data. First, no factor comparable to the motivation dimension in the Annehurst system (or what Bloom refers to as "affective entry behaviors") emerges here as a factor at all. That is surprising. Teachers invariably postulate motivation as an important and observable aspect of learner behavior. In fact, many teachers feel that it may even be a more powerful determiner of achievement in school than intelligence or past experience. However, no factor even approximating that dimension appeared.

Second, it is obvious that teachers can use these terms to characterize learners whom they know very well. The language communicates to teachers; they can apply the terms to people; the terms emerge in a patterned way.

Third, there is some correspondence between the factors that emerged here and the original Annehurst dimensions, but not much. A very important question must be raised: is the disparity between these factors and the Annehurst dimensions a function of the fact that the reality is different than those who developed the Annehurst concepts presumed? Or, is it

because the organizing rubrics that are an integral part of the Annehurst system shape the meaning of the specific descriptor terms so that the teachers who use the ACCS descriptors look for different dimensions of human existence that relate to learning than teachers do when they use the descriptor terms in isolation? We do not know. This problem must be studied further.

The ideologies that characterizes psychology and education may simply mean that human beings can be characterized in various ways, and all of those ways may be valid. Or, it may be that none or only some of the perspectives are useful. Theoretical orientations should be helpful to the researcher, but they may become "locked down" to the extent that the reality of learners is always distorted to fit our theoretical frames. Further work must be done to help teachers understand their learners so they will be able to ascertain precisely different kinds of information regarding the different facets of a learner's behavior and being that are important in learning day after day.

References

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6. Benjamin Bloom. Human Characteristics and School Learning (New York: McGraw Hill Book Co., 1976).

Table 1

Factor 1

Item	Loading	Descriptor	ACCS Dimension
43.	81	lacks skills of learning	(E)
48.	80	slow to learn	(I)
15.	79	has not mastered previous learnings	(E)
2.	77	has poor memory	(I)
55.	74	low achievement	(E)
83.	67	has read very little	(E)
61.	65	shallow thinker	(I)
78.	64	cannot integrate ideas	(I)
69.	54	unimaginative	(C)
21.	52	restricted with ideas	(C)
20.	51	aimless	(M)
30.	50	in tolerant of complexity	(I)
34.	49	limited interests and activities	(E)
[illegible].	43	lacks initiative	(M)
72.	41	copyist	(C)
28.	-39	able to form new patterns or relationships	(C)
66	-47	inquisitive	(M)
7.	-48	independent	(EP)
57.	-49	reflective with ideas	(I)
24.	-54	intrigued with complexity	(I)
67.	-61	has read a lot	(E)
5.	-62	can integrate ideas	(I)

Table 1 (cont.) Factor I

Item	Loading	Descriptor	ACCS Dimension
46.	-62	fluent with ideas	(C)
37.	-72	high achievement	(E)
80.	-72	has skills of learning	(E)
70.	-75	has good memory	(I)
10.	-77	has mastered previous learnings	(E)
35.	-81	quick to learn	(I)

Table 2

Factor II

Item	Loading	Descriptor	ACCS Dimension
11.	72	friendly	(S)
38.	65	enthusiastic	(M)
39.	63	forgiving	(S)
31.	61	communicative	(S)
76.	59	optimistic	(EP)
63.	58	flexible	(C)
32.	57	participator	(S)
77.	57	open-minded	(EP)
40.	55	tolerant	(S)
51.	54	empathic	(S)
41.	49	imaginative	(C)
17.	32	altruistic	(S)
26.	41	shows initiative	(M)
81.	-47	blames others	(EP)
50.	-49	loner	(S)
53.	-44	indifferent	(M)
56.	-53	pessimistic	(EP)
27.	-54	rigid	(C)
23.	-55	prejudiced	(S)
49.	-56	irrational	(I)
59.	-58	uncommunicative	(S)
33.	-60	holds a grudge	(S)

Table 2 (cont.

Item	Loading	Factor II Descriptor	ACCS Dimension
75.	-60	selfish	(S)
14.	-61	close-minded	(EP)
36.	-65	callous	(S)
65.	-71	present-oriented	(M)

Table 3

Factor III

Item	Loading	Descriptor	ACCS Dimension
22.	70	impulsive	(EP)
12.	61	impulsive with ideas	(I)
4.	59	risk taker	(C)
13.	51	demands instant gratification	(M)
74.	-42	rational	(I)
19.	-49	accepts blame	(EP)
84.	-53	able to delay gratification	(M)
82.	-61	cautious	(C) (see note on item 4 above)

Table 4

Factor IV

Item	Loading	Descriptor	ACCS Dimension
8.	63	lacks assurance	(EP)
9.	59	uncommunicative	(S)
44.	58	dependent	(EP)
71.	40	present-oriented	(M)
68.	38	difficulty forming new patterns or relationships	(C)
79.	-35	purposeful	(M)
58.	-45	autonomous	(C)
52.	-51	confident	(EP)
29.	-46	internal locus of control	(EP)

Table 5

Factor V

Item	Loading	Descriptor	ACCS Dimension
1.	68	has traveled widely	(E)
25.	59	stimulus-rich background	(E)
73.	55	extensive interests and activities	(E)
64.	-49	stimulus-poor background	(E)
42.	-57	has not traveled much	(E)
(34.)	-36	limited interests and activities	(E)

Parentheses indicate item which weights more heavily on Factor I.

Table 6

Factor VI

Item	Loading	Descriptor	ACCS Dimension
47.	47	conforming	(C)
62.	35	external locus of control	(EP)
54.	-42	original	(C)
(69.)	36	unimaginative	(C)
(24.)	-39	intrigued with complexity	(I)
(66.)	-40	inquisitive	(M)
(57.)	-42	reflective with ideas	(I)

Parentheses indicate items which weight more heavily on other factors.

Table 7

Factor Loadings of the Items

I		II		III		IV		V		VI	
Item	Loading	Item	Loading	Item	Loading	Item	Loading	Item	Loading	Item	Loading
43	.81	11	.72	22	.70	8	.63	1	.68	47	.47
48	.80	38	.65	12	.61	9	.59	25	.59	62	.35
15	.79	39	.63	4	.59	44	.58	73	.55		
2	.77	31	.61	13	.51	71	.40			54	-.42
55	.74	76	.59			68	.38	64	-.49	(69)	.36
83	.67	63	.58	74	-.42	79	-.35	42	-.57		
61	.65	32	.57	19	-.49	58	-.45	(34)	-.36	(24)	-.39
78	.64	77	.57	84	-.53	52	-.51			(66)	-.40
69	.54	40	.55	82	-.61	29	-.46			(57)	-.42
21	.52	51	.54								
20	.51	41	.49								
30	.50	26	.41								
34	.49	17	.32								
60	.43										
72	.41	81	-.47								
28	-.39	50	-.49								
		53	-.44								
66	-.47	56	-.53								
7	-.48	27	-.54								
57	-.49	23	-.55								
24	-.54	49	-.56								
67	-.61	59	-.58								
5	-.62	33	-.60								
46	-.62	75	-.60								

Table 7 (cont.) Factor Loadings of the Items

I		II		III		IV		V		VI	
Item	Loading	Item	Loading	Item	Loading	Item	Loading	Item	Loading	Item	Loading
37	-.72	14	-.61								
80	-.72	36	-.65								
70	-.75	65	-.71								
10	-.77										
35	-.81										

Items in parentheses weight more heavily on other items but have significant loadings on these factors.

APPENDIX A

(Please read very carefully)

INSTRUCTIONS
STUDENT DESCRIPTION Q-SORT

Attached are several perforated pages. Tear each page into separate slips or pieces, each containing a phrase which can be used to describe a characteristic of an individual learner. We want you to use these phrases to describe the characteristics of one student that you know well. In making the description, please think of one student you know very well, then describe that student by arranging the descriptive characteristic on each slip of paper according to the distribution outlined below. That is, think about one person whom you know extremely well, then describe that person by arranging the attached slips describing characteristics as indicated below.

	Least like the person								Most like the person		
Category Number	1	2	3	4	5	6	7	8	9	10	11
Number of Characteristics	1	2	6	11	14	16	14	11	6	2	1

You must place one and only one statement in category #1. This is the characteristic which is least like the person you are describing. Category #2 will contain the two (and only two) next least like the learner involved, and so on. The phrase most like the student with whom you are concerned will be placed in category #11.

The easiest way to make the sort is to begin by dividing the 84 phrases into three piles--"most like your learner," "least like your learner," and a third group between these. The three piles may then be subdivided into the final eleven piles.

After you have completed the sort, record your responses on the Op-Scan answer sheet. Please read the directions for recording these responses on the Op-Scan sheet very carefully. There is a kind of "knack" to this, but it will become apparent if you study that sheet. Everything depends on your accomplishing this final step accurately, so please follow directions carefully. Your responses will be kept in the strictest confidence.

Your help is very much appreciated. Please be as careful as possible.

1. has traveled widely

2. has a poor memory

3. persistent

4. risk taker

5. can integrate ideas

6. future-oriented

7. independent

8. lacks assurance

9. easily discouraged

10. has mastered previous learnings

11. friendly

12. impulsive with ideas

13. demands instant gratification

14. closed-minded

15. has not mastered previous learnings

16 contemplative

17. altruistic

18. deliberate

19. accepts blame

20. aimless

21. restricted with ideas

22. impulsive

23. prejudiced

24. intrigued with complexity

25. comes from a stimulus rich background

26. shows initiative

27. rigid

28. able to form new patterns or relationships

29. internal locus of control

30. intolerant of complexity

31. communicative

32. participator

33. holds a grudge

34. limited interests and activities

35. quick to learn

36. callous

37. high achievement

38. enthusiastic

39. forgiving

40. tolerant

41. imaginative

42. has not traveled much

43. lacks skills of learning

44. dependent

45. bored

46. fluent with ideas

47. conforming

48. slow to learn

49. irrational

50. loner

51. empathic

52. confident

53. indifferent

54. original

55. low achievement

56. pessimistic

57. reflective with ideas

58. autonomous

59. uncommunicative

60. lacks initiative

61. shallow thinker

62. external locus of control

63. flexible

64. stimulus poor background

65. unfriendly

66. inquisitive

67. has read alot

68. difficulty forming new patterns or relationships

69. unimaginative

70. has a good memory

71. present oriented

72. copyist

73. extensive interests and background

74. rational

75. selfish

76. optimistic

77. open-minded

78. cannot integrate ideas

79. purposeful

80. has skills of learning

81. blames others

82. cautious

83. has read very little

84. able to delay gratification

LEARNERS'

VERBAL EXPRESSION (SPEECH)	
fluent speech	labored speech
responds in complete sentences	one-word-response
relevant verbal response	verbal responses not relevant
pronounces common words properly	mispronounces common words
uses correct plural	uses incorrect plural
seldom makes grammatical errors	frequently makes grammatical errors
seldom makes syntactical errors	frequently makes syntactical errors
responds immediately	delays in responding

AUDITORY PERCEPTION	
can concentrate in a noisy situation	easily distracted by noises
perceives phonic sounds accurately	cannot perceive phonic sounds
recognizes spoken words which are partially presented	cannot recognize a spoken word when partially presented
understands words in songs	cannot understand words in songs
able to recall how things sound	cannot recall how things sound
able to restate words or sounds in sequence	cannot restate words or sounds in sequence
able to follow directions	cannot follow directions

CHARACTERISTICS

VISUAL PERCEPTION	
follows symbols from left to right easily	difficulty following symbols left to right
can sequence and match both objects and symbols	cannot sequence or match either objects or symbols
easily distinguishes an object from its background	cannot distinguish an object from its background
comprehends a variety of visual stimuli	easily confused by visual stimulation
copes with color-coded materials	difficulty with color-coded materials
easily identify similar objects or symbols in varying contexts	difficulty identifying objects or symbols in varying context
recalls visual stimuli in sequence easily	difficulty with visual sequential memory
discriminates between horizontal, curve, and diagonal	difficulty discriminating horizontal, curve, and diagonal
coordinates hand and eye movements skillfully	cannot coordinate hand and eye movements
forms letters easily	difficulty forming letters
completes incomplete visual forms or patterns	unable to complete incomplete forms or patterns

MOTOR PERCEPTION	
manipulates small objects easily and skillfully	has difficulty manipulating small objects
coordination between hand and eye is smooth	has difficulty with hand eye coordination
maintains body balance without difficulty	has difficulty maintaining body balance
moves rhythmically without difficulty	has difficulty moving rhythmically
has no difficulty with laterality and directionality	has difficulty with laterality and directionality
has no difficulty with spatial relationships	has difficulty with spatial relationships

LEARNERS'

EXPERIENCE	
has traveled widely	has not traveled much
stimulus-rich background	stimulus-poor background
has read a lot	has read very little
has mastered previous learnings	has not mastered previous learnings
has skills of learning	lacks skills of learning
high achievement	low achievement
extensive interests and activities	limited interests and activities

INTELLIGENCE	
rational	irrational
can integrate ideas	cannot integrate ideas
contemplative	shallow thinker
quick to learn	slow to learn
intrigued with complexity	intolerant of complexity
reflective with ideas	impulsive with ideas
has good memory	has poor memory

MOTIVATION	
energetic	lazy
persistent	easily discouraged
shows initiative	lacks initiative
enthusiastic	bored
tries hard	gives up
purposeful	aimless
inquisitive	indifferent
future-oriented	present-oriented
curious	uninterested
able to delay gratification	demands instant gratification

CHARACTERISTICS

EMOTION-PERSONALITY	
patient	impatient
open-minded	closed-minded
accepts blame	blames others
good natured	moody
has sense of humor	lacks sense of humor
confident	lacks assurance
mature	immature
optimistic	pessimistic
independent	dependent
deliberate	impulsive
internal locus of control	external locus of control
dependable	undependable
responsible	irresponsible

CREATIVITY	
innovative	traditionalist
flexible	rigid
original	copyist
risk taker	cautious
fluent with ideas	restricted with ideas
autonomous	conforming
able to elaborate	difficulty elaborating
able to form new patterns or relationships	difficulty forming new patterns or relationships
imaginative	unimaginative

SOCIAL	
communicative	uncommunicative
participator	loner
cooperative	uncooperative
forgiving	holds a grudge
friendly	unfriendly
empathic	callous
sympathetic	unsympathetic
tolerant	prejudiced
altruistic	selfish
respectful	disrespectful

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